A WIDEBAND 180° MICROWAVE PHASE SWITCH

ABSTRACT

The invention relates to a wideband 180° microwave phase switch structure, consisting of microwave or millimetric wave elements such as waveguides, microstrips, striplines or coaxial cables, which are connected in such a way that they can produce a structure with a 180° phase difference between the two possible low-loss outputs in the band width used, with a high band width, flat phase and balanced amplitude. The structure disclosed in the invention is based on interconnection of two hybrid rings ("magic T") that are embodied according to a given configuration of the different ports of the two rings, thereby providing a unique structure resulting in a practical application device with a 180° phase difference and given properties relative to the length of the waves and the impedances relative to the resulting lines.